Contract for Geographical Information System



for Spencer County, Indiana

WTH Engineering, Inc. (the "Company") wishes to Implement a Geographical Information System (GIS) for the Spencer County Board of Commissioners (the "Client") to be used by various offices within the county. The following defines the scope of products and services to be offered by the Company and the compensation to be paid by the Client.

- 1. Summary: The following is a summary of this contract. Each item is described in more detail in the sections below.
 - a) The company will develop a digital map of the Client's county that will include aerial photography, topography, road centerlines, water ways, landmarks, addresses, road inventory, sign inventory, and bridge inventory.
 - b) The company will include on the digital map a sample 4 square mile area showing property lines, soil classifications, and land use designations.
 - c) The company will provide and install onto 10 computers all of the necessary software required to view, query, and edit the digital map. The mapping software will also be interfaced with the client's existing 911 system.
 - d) The company will keep the map up to date, provide technical support on using the software, synchronize data between users, and provide an off-site backup on a regular basis. Upgrades to the software will be automatically installed onto the Client's computers as they become available.
 - e) The cost of these products and services will be \$60,000 plus \$1,000 per month maintenance.
- 2. Initial Map and Data Development: All of the following data sets are included. All layers are positioned on the map to line up with each other and with the world.
 - a) <u>Topography</u>: A background raster image showing 5 or 10 foot interval contour lines will be included as a layer on the map. This information will come from scanned USGS Quad maps.
 - b) Aerial Photography: 1997 digital ortho photos will be included as a background raster image on the map. These photos will come from the USGS and have a 1 meter per pixel resolution and have been orthogonally rectified to remove relief displacement so that ground features are displayed in their true ground position.
 - c) Roads: The centerline of all roads, streets, highways, and railroads will be identified on the map. The locations of these features will be determined by the aerial photography and the names will come from city and county maps provided by the client. It is recommended that the client also provide the company with a

- copy of their Master Street Address Guide, or MSAG, so that all road name spellings can be checked to exactly match those used in the client's E911 system.
- d) <u>Streams, Lakes, and Rivers</u>: All Major waterways will be drawn on the map and named according to maps provided by the client. The location of any remaining creeks, streams, and ditches that are not specifically identified will be visible on the aerial photography and topography layers.
- e) <u>Landmarks and Boundaries</u>: Any towns, place names, and points of interest marked on maps provided by the client will be identified on the map. The limits of each City, Township, Fire Department, and Commissioner district will also be included.
- f) Addresses: Each individual address will be pinpointed on the map. Source materials will be required from the client, such as paper maps or marked aerial photos, showing the location and identity of each of these addresses. In any incorporated areas where exact address locations are not known, address ranges will be marked on the streets so that an approximate location can be given whenever inquiring on an address.
- g) Bridge Inventory: The location of each county bridge will be pinpointed on the map based on map(s) provided by the client or other sources. Each bridge will be linked to a custom designed data sheet where detailed specifications and notes can be recorded. The company will convert or link any existing electronic data provided by the client or by INDOT into the database. Any color photographs and sketches of each bridge will also be included in the database if provided by the client.
- h) Road Inventory: In addition to the road layer described above, a more detailed road inventory layer will be included. Each segment of each county road will be identified with a unique segment number. Each segment on the map will be linked to a custom designed data sheet where detailed specifications and notes can be recorded. The company will convert or link into the database any existing road inventory data if provided by the client in an electronic format.
- i) Sign Inventory: The location of each county sign will be pinpointed on the map if map(s) are provided by the client showing their locations. Each sign will be linked to a custom designed data sheet where detailed specifications and notes can be recorded. The company will convert or link into the database any existing sign inventory data if provided by the client in an electronic format.
- j) Property Lines Sample: The company will digitize 4 contiguous square miles of the client's existing plat maps for the purpose of demonstrating exactly how the system will work in this area. This sample will include any blowup pages and subdivisions contained within the sample area. The client can select any 2 by 2 mile area of the county that represents a typical mix of urban and rural development. The company will align each digitized plat into its correct location on the finished map using visual control points on the aerial photography. The finished map will show all township and range lines, section lines, platted subdivisions boundaries, subdivision lot lines, and parcel lines in the sample area.
- k) Soil Classifications Sample: For the same sample area selected above, the company will digitize the client's existing soil maps. The company will align

- each digitized plat into its correct location on the finished map using visual control points on the aerial photography.
- Land Use Sample: For the same sample area selected above, the company will
 trace each land use type on the map indicating which areas are tillable, nontillable, or woodland. Other classifications could be used as deemed necessary by
 the county assessor.
- 3. Description of Software: The Software provided with this contract is called "GIS Map Lite" version 3.6. A compiled Microsoft Access database and a runtime version of Microsoft Access is also included for each licensed user. This software and its components provide all the user interface necessary to view, query, and manipulate the map and its data.
 - a) The following is a summary of the functionality included in the software:
 - The software provides various zooming and panning tools to make it possible to easily view any area of the map at any scale.
 - Locate any named objects or location on the map by selecting them from an alphabetical index or by pressing the Map button from any data sheet.
 - Users can query the database for a set of records matching any criteria based on any combination of field values and then show the results on the map.
 - Point and click on any object on the map to view the data linked to that object (i.e. bridge, road, address, etc)
 - Measure any distance or area.
 - Layers can be turned on and off independently to customize the appearance of the map at each workstation.
 - Import or Export data from and to other GIS applications.
 - E911 interface to provide automatic pop-up map with each E911 call.
 - Editing tools are included to assist in adding or changing any information.
 - A parcel assessment tool automatically determines the soil types and land types for a parcel and calculates the acreage of each portion of the parcel. This requires a parcel, soil and land use layer on the map.
 - b) Hardware Requirements. The software can be installed and ran on any computer provided by the client that meets the following minimum requirements:
 - Windows 95, 98, NT or better operating system.
 - 32 Megabytes of memory (128 recommended).
 - 2 Gigabytes of hard disk space.
 - 15" SVGA color monitor capable of displaying 16 bit color at 800 X 600 resolution or better. (21" recommended)
 - Keyboard and mouse
 - Modem and/or Internet Access. (required for data synchronization, backup, and support)

4. Installation and Training:

- a) Use of Software: The software will be licensed for use on 10 computers located in the county and used for county government purposes only. A list of these initial 10 users must be provided to the company prior to installation. The software may be installed on a network of computers but "use" of the software is limited to those users agreed upon prior to installation
- b) Setup and Training: When the project is completed company will install the software and data files into each department's existing computers and setup each workstation with a strategy of sharing data with the other departments. Note that no computer hardware is included with the purchase of this system. We will provide 24 man-hours of on site training to show each department how to use the system for their application.
- c) 911 Interface: The company will interface the mapping software with the client's E911 system so that a map will automatically be displayed with each 911 call showing the location of the caller. To do this, the client's 911 provider must make available a local connection point that provides an ALI stream of data with each 911 call. The client's 911 provider may have additional charges for their part of this interface.

5. Maintenance:

- a) Data Maintenance: The Company will maintain the data sets included in the Initial Map Development for the client, excluding the parcel sample, as part of an ongoing maintenance agreement. All regular add, change, or delete requests from the client will be given to the company on paper or in some other agreed upon format. The changes will be made by the company and then electronically updated to the client's computer(s) periodically as agreed to with the Client.
- b) System Support: As part of this maintenance agreement, business hours phone support will be provided for one representative from each department. Phone support will include answering questions regarding the use of the software and making changes to the system configuration to adapt to the client's changing needs.
- c) Software Upgrades: Any enhancements made to the GIS Map Lite system during the life of the maintenance agreement will be automatically uploaded to the client's computer(s) as they become available.
- d) Data Synchronization: This service will make it possible for departments not connected to the main county computer network (i.e. remote users) to share data with other departments. Remote users who have internet access on their computer will be able to automatically dial into the company's system and send or receive map updates.
- e) Off Site Data Back-up: The company will maintain a "back-up" of the client's Map Data off-site of the county. In case of fire, this data back-up will be provided to the county at no charge.
- f) Additional Services: Any additions to the map requested by the client that are not covered in the above maintenance agreement can be added by the company at a cost of \$55 per hour. This would include any minor additions such as new map

layers. An up front price for additions will be quoted based on this rate for each request. This rate is guaranteed for a period of 36 months.

- 6. Price and Payment: The above products and services will be provided for a price of \$60,000.00 plus \$1,000 Monthly maintenance.
 - a) Phase I: \$30,000 Payment. To be delivered 30 days after the signing of this contract. This includes the delivery of the software and base map including digital aerial photography and topography for the entire County
 - b) Phase II: \$30,000 Payment. To be delivered 90 days following the signature of this contract. Includes the delivery of all remaining products including training.
 - c) Maintenance: The monthly maintenance is \$1000.00 per month to be payable quarterly. This covers all services described in section 5 above. The Company commits to locking in this monthly rate for a period of 36 months from the date of acceptance.
 - d) Additional Users: For purposes of this contract, the company will provide additional user licenses for a cost of \$200.00 each. This price is guaranteed for 12 months.

IN	WITNESS	WHEREOF,	the parties ha	ve executed th	his Agreement	as of this	3RO	day
of.	dey	_, 2000.	-		-			

Company: WTH Engineering, Inc. **Client:**

Spencer County

Board of Commissioners

Title: President